UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street Philadelphia, Pennsylvania 19103-2029

NOV 1 2 2014

SUBJECT: Inspection Report for Assateague National Seashore Sewage Treatment Plant

FROM: Andrew Seligman, Environmental Scientist

Allison Graham, Environmental Engineer

TO: Michelle Price-Fay, Chief, NPDES Enforcement Branch

Inspection Date: August 26, 2014

Facility Address
U.S. Department of the Interior
National Park Service
Assateague Island, National Seashore
7206 National Seashore Lane
Berlin, Maryland 21811

NPDES Permit # MD0021091

EPA Personnel
Andrew Seligman, Environmental Scientist
Allison Graham, Environmental Engineer

MDE Personnel
Michele Burroughs, Inspector

Assateague National Seashore Sewage Treatment Plant Personnel Ish Ennis, Maintenance Manager Randy Hartz, Forman Joe Milo, (Contractor) Operator, Singh Operational Services

Narrative

Ms. Allison Graham and Mr. Andrew Seligman arrived at the facility at 8:40 a.m.; both inspectors presented their credentials to Mr. Ish Ennis and Mr. Randy Hartz. Mr. Seligman stated to Mr. Ennis and Mr. Hartz they were on-site to perform a NPDES compliance inspection. Mr. Seligman stated to Mr. Ennis that Michele Burroughs from MDE will be joining the inspection and that we shall wait for Ms. Burroughs to arrive before starting the inspection. Ms. Burroughs arrived at 9:10 a.m. The inspection began at 9:10 a.m.

Mr. Seligman asked Mr. Ennis about the operational structure for the Sewage Treatment Plant (STP). Mr. Ennis stated the organization has been experiencing a lot of operator turn-over and the facility has had three operators in the last five years. Mr. Ennis stated typically there is a full time operator on site five days a week and a temporary operator is on site two days a week. Mr. Ennis stated the STP is now run by their contractor, Singh Operational Services. Mr. Ennis stated Mr. Chandra Singh own the company. Mr. Singh was not present at the time of the inspection. Mr. Ennis stated Mr. Singh's phone number is 717-278-5315.

Mr. Ennis stated Mr. Singh has been rotating temporary operators between the STP and waste water treatment plants in the area on a day-to-day basis. Mr. Ennis stated the last full time operator was Mr. Rich Matthews; however, Mr. Singh no longer assigns Mr. Matthews to perform work at the STP. Mr. Matthews' last day at the facility was July 18, 2014 and Mr. Ennis stated that an advertisement for a full time utility systems operator was announced after Mr. Matthews' departure. Mr. Ennis stated the vacancy was not filled at the time of the inspection. Mr. Ennis stated the two temporary operators currently working at the plant are Mr. James C. Bell, not present at the time of the inspection, and Mr. Joe Milo. Mr. Ennis and Mr. Hartz states both Mr. Milo and Mr. Bell secured temporary wastewater treatment operator licenses. Mr. Milos called his office had had copies of these licenses e-mailed to Andrew Seligman.

Ms. Graham asked Mr. Ennis if the plant had or has any compliance issues. Mr. Ennis replied that he was not aware of any non-compliance issues at the plant.

Mr. Seligman asked Mr. Ennis, Mr. Hartz and Mr. Milo to describe the physical layout of the STP. Mr. Ennis stated prior to the year 2009, the plant was a sequential batch reactor system; Post 2009, the plant was physically changed to a micro filtration system. Ms. Graham asked if there was a treatment process flow diagram, and Mr. Ennis explained that he did not have a process flow diagram. Mr. Ennis and Mr. Milo stated during the months of January through February, the plant experiences average flows less than 2000 gallons per day (GPD); From March through December the plant experiences averages flows greater than 2000 GPD that can reach up to 12,000 GPD. Ms. Graham asked Mr. Ennis to explain the characteristics of the wastewater that is received at the facility. Mr. Ennis explained that wastewater is received from the visitor center, housing for National Park Service employees, and the University of Maryland Eastern Shore (on-site) research lab and administration offices. Mr. Ennis further explained that they are able to pick and choose what is hauled in from the island for treatment; however, the waste from the vault toilets on the island is taken directly to Berlin or Snowhill for treatment. In addition, Mr. Ennis stated that during the winter months, waste is brought in to the STP to make up for fluctuation during the non-recreational season. Ms. Graham asked Mr. Ennis if the aquarium water from the visitor center is discharged to the treatment plant. Mr. Ennis replied that the aquarium water, approximately 1700 gallons in total, is discharged into the grass behind the visitor's center, essentially land applied. Ms. Graham asked if the facility received any waste from a significant industrial user (SIU) of which Mr. Ennis replied that there were no SIUs within the service area. Mr. Seligman asked that the facility representatives walk through the treatment processes. Mr. Ennis, Mr. Milo, and Mr. Hartz provided the following process description: Waste water comes from: 1) Visitor Center, 2) University of Maryland (on-site) research lab, and 3) Housing for NPS employees. Flow from these facilities are pumped to the STP via two lift stations (one located at the visitor center, one located at the housing facilities) and then into a 2000 gallon influent tank. Flow enters a bar screen, which removes very large particles and solids, followed by a basket strainer and vibratory separator, and continues flowing to a 14,500 gallon equalization (EQ) tank. Flow exiting the EQ tank is conveyed to Anoxic Tank #1 (AN1) and proceeds to Aeration Tank #1 (AR1). Flow exits AR1 and enters into Anoxic Tank #2 (AN2). Baffles are installed in in AN2. Flow from AN2 enters the final aeration tank and proceeds to a membrane filter. The fine particles that are removed from the membrane filter is returned to AN1. Flow exiting the membrane filter flows through a ultra-violet unit for disinfection and is discharged to holding tank (called the reuse tank) upon which the flow is discharged from outfall #001 in Sinepuxent Bay.

Mr. Seligman asked Mr. Milo what pollutants were monitored, when they are monitored, who takes the samples, and how are the sample analyzed. Mr. Milo stated pH and DO measurements are measured at every tank, every day for plant operational purposes. Mr. Milo stated the following pollutants are monitored for purposes of NPDES Permit Compliance: Nitrate, Nitrites, Total Kjeldahl Nitrogen, Chemical Oxygen Demand, Phosphorous, Total Nitrogen, Total Ammonia, Dissolved Oxygen, pH and Fecal Coliform. The samples are taken by the operator on site to the lab owned and operated by Ocean City. Mr. Ennis and Mr. Milo states the results are compiled by the operators and sent to Mr. Singh. Mr. Singh reviews the information and signs the DMRs. Mr. Seligman asked Mr. Milo what are the sampling protocols and if the facility has any written sampling protocols in place for the operators, especially given a very high operator turn over-rate. Mr. Ennis and Mr. Milo stated no written sampling protocols or standard operating procedures have been written down or are in place. Mr. Milo stated for 8hour composite sampling, he places the sampler on line at 11 p.m. on Monday evenings and picks up the sample the on Tuesday mornings at 7 a.m. Ms. Graham asked if a composite sample was sent to the lab that day, and Mr. Milo stated that a sample was not taken that day because of problems with the mixers in the Anoxic tank. Fecal coliform, pH and dissolved Oxygen samples are taken using a grab sample method.

Mr. Ennis, Mr. Hartz, Mr. Milo, Ms. Graham, Mr. Seligman and Ms. Burroughs proceeded to walk through the facility around 10:00 a.m. A plan view and schematic were not available at the time of the inspection. Photos of the plant and collection system are shown in Appendix A. Mr. Seligman and Ms. Graham first observed the lift station for the housing units, which includes two internal pumps, as well as the control panel for the lift station (photos 1 and 2). Mr. Ennis and Mr. Hartz stated that they were unsure of how often the pump station beacons are exercised.

The inspection team next observed a grinder located outside of the Ecology Center which only receives sanitary flow as well as the second pump station outside of the visitor center (photos 3 and 4). The inspection team then went into the visitor center to observe the marine aquarium exhibit. The marine aquarium exhibit consisted of 4 tanks, 730 gallons in total, including one touch tank. Site personnel stated that 20-25% of the water from the aquariums is changed once every 6 weeks and that the aquarium wastewater is drained into a ditch behind the visitor center (photo 6). The aquarium wastewater is not treated prior to discharge outside of the facility and had previously been conveyed to the STP for treatment.

The inspection team then observed an in ground tank, which merges and meters flow from the two pump stations, as well as the lift station which conveys permeate from the STP and discharges the effluent to the Sinepuxent Bay(photos 7-9). Mr. Seligman and Ms. Graham observed flow meters at the lift station. Ms. Graham asked Mr. Ennis how often the flow meters are calibrated. Mr. Ennis and Mr. Hartz stated the flow meters are calibrated once per year. Ms. Graham stated to Mr. Ennis the flow meters are displaying zero—or no flow. Mr. Ennis and Mr. Hartz stated the lift station pumps operate in cycles. Each well must reach a certain height (equivalent to a set volume) in order for the pumps to begin operating. Mr. Ennis stated that there is not continuous flow to the Sinepuxent Bay from this lift station and that discharges only occur once the flow reaches the internal level sensing device which is set on floats. Ms. Graham asked about the capacity of the lift station and if aeration occurred in this tank. Mr. Milo stated that the tank is approximately 500 gallons and explained that the tank is not aerated. Ms. Graham asked if there was a potential that the effluent is sampled when the lift station is not discharging to the CB and Mr. Milo replied that there is a possibility that samples for effluent

may be taken when a discharge is not occurring from the lift station.

The inspection team then proceeded into the WWTP building and initially observed two bar screens (photos 11-12), the equalization tank (photo 13) and vibratory separator (photo 14). Ms. Graham asked when the EQ tank is activated and Mr. Milo explained that the EQ tank pumps between low and high flow limits which were unknown at the time of the inspection. AN1 was observed and inspectors noted foam accumulation in the corner of the tank (photos 15-16). Ms. Graham asked if mixing occurs in AN1 and Mr. Milo explained that mixing occurs but aeration does not occur. Ms. Graham asked that Mr. Milo perform a dissolved oxygen (DO) probe reading at AN1. Mr. Milo performed the reading and the results were 0.36 mg/l. The inspection team next observed AR1 and observed foam accumulation at the end of the tank (photo 23). Inspectors also observed that the pH and DO probe meters for AR1 read 9.77 and 3.61 mg/l respectively (photo 17). The facility was using Micro-C as a chemical additive at AR1 (photo 24). Ms. Graham asked Mr. Milo to explain the sludge wasting procedures at the STP. Mr. Milo stated that approximately 50-100 gallons of sludge is wasted per day in an interval of approximately 5 minutes. Inspectors next observed AN2 and AR2 (photos 25 and 26). Effluent from AN2 appeared to be heavy with solids (photo 28). Inspectors last observed the membrane filtration unit (photo 30) as well as the UV disinfecting unit. Mr. Hartz stated that the membrane filtration units clog every 2-3 weeks.

After the walk through of the facility, Mr. Seligman stated the group would like to proceed to review some documents. Mr. Seligman asked to see the DMRs and all the sampling sheets from the past 6 months. Mr. Seligman and Ms. Graham reviewed some of these materials and asked if copies can be made and sent to us. Mr. Ennis stated he would have that completed for us and will probably be able to send it to us via e-mail. Mr. Seligman stated to Mr. Ennis and Mr. Milos that for the past few years sampling documents, chain of custody forms and related documents seem to not be consistently filled our correctly. Mr. Ennis stated Mr. Singh is in charge of those operations and procedures and suggested I speak with him.

Mr. Seligman told Mr. Ennis EPA will be producing an inspection report and will provide a copy to him when it is completed. Mr. Seligman stated to Mr. Ennis that he (Mr. Seligman) and Ms. Graham would like to have a follow up conference call after the inspection. Mr. Ennis stated he would assist us setting up this call. The inspection team departed 1pm.

ATTACHMENTS

- 1. Appendix A Photo Log
- 2. E-Mail containing copies of WWTP Operator Licenses

Seligman, Andrew

From:

Kaitlyn <sludgepatty@gmail.com>

Sent:

Tuesday, August 26, 2014 10:23 AM

To:

Seligman, Andrew

Cc:

Chandra Singh; sludgethrower@gmail.com

Subject:

Assateague License

Attachments:

Joe Milo Temp License.pdf; Rich Mathieu License.pdf; Chandra Singh License.pdf

Good Morning Andrew,

As requested, I have attached the licenses for Assateague.

Thank you,

Kaitlyn Secora
Administrative Assistant
Singh Operational Services, Inc.
8 Rees Drive

Willow Street, PA 17584 Phone: 717-464-7395 Fax: 717-464-7398

State of



Maryland 029089

DEPARTMENT OF THE ENVIRONMENT

LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

WATERWORKS & WASTE SYSTEM OPERATORS

THE MARYLAND STATE BOARD OF CERTIFIES THAT

JOSEPH MIPO

IS AN AUTHORIZED

TEMPORARY:

Wastewater (5, A), Water Treatment (3)

IN ACCORDANCE WITH THE ENVIRONMENT ARTICLE OF THE ANNOTATED CODE OF MARYLAND

LIC. REG. CEST. NO. 4468

EXPIRATION DATE 07/01/2015

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES





Board of Waterworks & Waste Systems Operators

This is to Certify that

JOSEPH MILO CERTIFICATE NO. 4468

has met the qualifications established by the State of Maryland and has been granted **TEMPORARY CERTIFICATION** as a

CLASS 5A WASTEWATER TREATMENT PLANT OPERATOR

In Testimony Witness the Signature of the Board Secretary The first day of July 2012



BOARD SECRETARY

cycle of Mary

Board of Waterworks & Waste Systems Operators

This is to Certify that

RICHARD M. MATHIEU CERTIFICATE NO. 2685

has met the qualifications established by the State of Maryland and has been duly certified as a

SUPERINTENDENT
WASTEWATER TREATMENT PLANT AS DESIGNATED
BY ASSATEAGUE ISLAND NATIONAL SEASHORE

In Testimony Witness the Signature of the Chairman and Secretary

Chairman

Secretary

the first day of August 2013



Board of Waterworks & Waste Systems Operators

This is to Certify that

RICHARD M. MATHIEU CERTIFICATE NO. 2685

has met the qualifications established by the State of Maryland and has been duly certified as a

SUPERINTENDENT WATER TREATMENT PLANT AS DESIGNATED BY ASSATEAGUE ISLAND NATIONAL SEASHORE

In Testimony Witness the Signature of the Chairman and Secretary

Chairman

Secretary

the first day of August 2013



Board of Waterworks & Waster Systems Operators

This is to certify that

RICHARD M. MATHIEU Certificate no. 2685

nas met the qualifications established by the State of Maryland and has been duly certified as an

CLASS SAWASTEWATER TREATMENT PLANT

Modern C. M.



SAVE THIS PORTION OF CARD AND USE REVERSE SIDE FOR NAME AND / OR ADDRESS CHANGES, BOARD MUST BE NOTIFIED OF THESE CHANGES IMMEDIATELY.

Board of

WATERWORKS & WASTE SYSTEM OPERATORS 1806 WASHINGTON BLVD BALTIMORE, MD 21230

RICHARD M. MATHIEU P.O. BOX 1651 BERLIN,MD 21811

STATE OF MARYLAND DEPARTMENT OF THE ENVIRONMENT LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

THE MARYLAND STATE BOARD OF

WATERWORKS & WASTE SYSTEM OPERATORS CERTIFIES THAT

> RICHARD M. MATHIEU IS AN AUTHORIZED

OPERATOR: WS, WA, T3

In accordance with the Environment Article of the Annotated Code of Maryland

UC. REG. CERT, NO.

EXPIRATION DATE

2585

02/01/2016

State of



Maryland

034407

DEPARTMENT OF THE ENVIRONMENT

LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

THE MARYLAND STATE BOARD OF

WATERWORKS & WASTE SYSTEM OPERATORS

CERTIFIES THAT

RICHARD M. MATHIEU

IS AN AUTHORIZED OPERATOR:

Wastewater (5, A), Water Treatment (3)

IN ACCORDANCE WITH THE ENVIRONMENT ARTICLE OF THE ANNOTATED CODE OF MARYLAND

LIC. REG. CERT. NO.

EXPIRATION DATE

2685

02/01/2016

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES

SAVE THIS PORTION OF CARD AND USE REVERSE SIDE FOR NAME AND / OR ADDRESS CHANGES. BOARD MUST BE NOTIFIED OF THESE CHANGES IMMEDIATELY.

Board of

WATERWORKS & WASTE SYSTEM OPERATORS 1800 WASHINGTON BLVD BALTIMORE, MD 21230

RICHARD M. MATHIEU P.O. BOX 1651 BERLIN,MD 21811 STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

THE MARYLAND STATE BOARD OF

WATERWORKS & WASTE SYSTEM OPERATORS

CERTIFIES THAT

RICHARD M. MATHIEU

IS AN AUTHORIZED.
SUPERINTENDENT: T3, W5, WA

In accordance with the Environment Article of the Annotated Code of Maryland

UC REG CERT NO. 2685

08/01/2016

SIGNATURE OF REARER

aa waaraa aa a

SECRETARY MDE

State of



Maryland

038437

DEPARTMENT OF THE ENVIRONMENT

LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

WATERWORKS & WASTE SYSTEM OPERATORS

THE MARYLAND STATE BOARD OF RICHARD M. MATHIEU

CERTIFIES THAT
IS AN AUTHORIZED

SUPERINTENDENT: Water Treatment-(2), Wastewater-(5,A)

IN ACCORDANCE WITH THE ENVIRONMENT ARTICLE OF THE ANNOTATED CODE OF MARYLAND

LIC REG. CERT. NO. 2685 EXPIRATION DATE 08/01/2016

SECRETARY MDE

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES



Board of Waterworks & Waste Systems Operators

This is to Certify that

CHANDRA SINGH CERTIFICATE NO. 2226

has met the qualifications established by the State of Maryland and has been duly certified as a

WASTIEWATTER TREATMENT PLANT AS DESIGNATIED BY SINGH OPERATIONAL SERVICES, INC.

In Testimony Witness the Signature of the Chairman and Secretary

M. W. C. Shaller

the first day of August 2010

New Jersey Department of Environmental Protection



This Certifies That



CHANDRA B SINGH

Has satisfactorily passed an examination and is hereby authorized to operate under a

S3 WASTEWATER TREATMENT LICENSE

In accordance with the classification prescribed on the annual license therefore.

Licenses are Renewable.

License No. 555442 Trenton, New Jersey May 16, 2011



In Witness Whereof, I have hereunto set

my hand and caused the Seal of the State

Department of Environmental Protection

to be affixed.

Wolfgang Skacel
Assistant Commissioner, Compliance & Enforcement

Board of

WATERWORKS & WASTE SYSTEM OPERATORS 1800 WASHINGTON BLVD BALTIMORE, MD 21230

CHANDRA B. SINGH 8 REES DR WILLOW STREET, PA 17584 STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

THE MARYLAND STATE BOARD OF

WATERWORKS & WASTE SISTEM OPERATORS

CERTIFIES THAT

CHANDRA B. SINGH

IS AN AUTHORIZED

OPERATOR: W5, WA

In accordance with the Environment Article of the Annotated Code of Maryland

UC. REG. CERT. NO. 2326

EXPIRATION DATE 06/01/2015

SIGNATURE OF BEARER

MDE MDE SECRETARY MDE

State of



Maryland

031821

DEPARTMENT OF THE ENVIRONMENT

LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

THE MARYLAND STATE BOARD OF WATERWORKS & WASTE SYSTEM OPERATORS
CHANDRA B. SINGH

CERTIFIES THAT
IS AN AUTHORIZED

OPERATOR:

Wastewater- (5, A)

IN ACCORDANCE WITH THE ENVIRONMENT ARTICLE OF THE ANNOTATED CODE OF MARYLAND

LIC. REG. CERT. NO

06/01/2015

SECRETARY MDE

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES

SIGNATURE OF BEARER



Board of Waterworks & Waste Systems Operators

This is to Certify that

CHANDRA B. SINGH CERTIFICATE NO. 2326

has met the qualifications established by the State of Maryland and has been duly certified as an

OPERATOR CLASS 5A WASTEWATER TREATMENT PLANT

Testimony Witness the Signature of the Chairman and Secretary

Chairman

Secretary

Commonwealth of Pennsylvania

Department of Environmental Protection

In accordance with the
State Board for Certification of Water and Wastewater Systems Operators
and the Regulations of the
Department of Environmental Protection

CHANDRA'B SINGH

Is Hereby Authorized to Operate
WASTEWATER SYSTEM

Client ID: 200338

Glass:-B,E Subclass::1,2,3,4

CHANDRA B SINGH 409 HILLTOP RD STRASBURG PA 17579-9771

Issue Date Expiration Date Jan 11, 2013 Dec 31, 2015

Certificate No. S9915

Board Chairman

a e P

Assateague National Seashore Wastewater Treatment Plant Inspection August 26, 2014

Inspectors: Andrew Seligman, and Allison Graham
Photos taken by Allison Graham
Photo Log created by Allison Graham

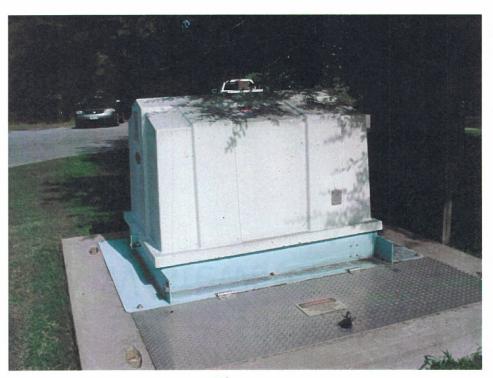


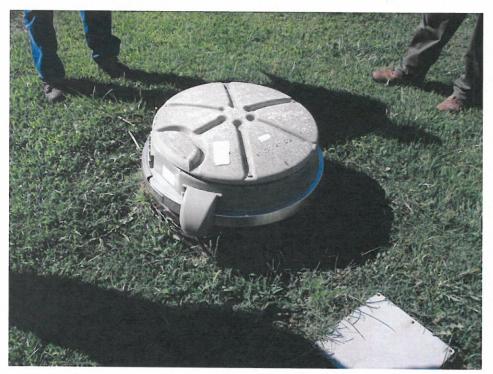
Photo 1

View of lift station for housing units. Lift station includes 2 internal pumps.



Photo 2

View of control panel for lift station in Photo 1. Note – Site representatives stated that they were unsure of how often beacons are exercised.





View of grinder located outside of the Ecology Center. Site representatives stated this receives sanitary flow only.



Photo 4

View of lift station located outside of Visitor center. Note that there are only two lift stations that send flow to the WWTP.



Photo 5

Additional view of lift station location outside of visitor center.



Photo 6

View of ditch located under visitor center that receives aquarium "wastewater." The "wastewater" is not treated prior to discharge. Note that that aquarium wastewater was previously discharged to WWTP.

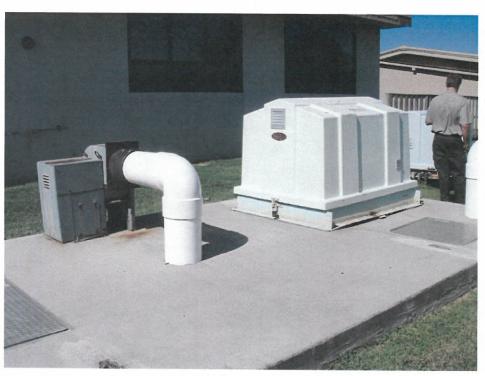


Photo 7

In ground tank that merges wastewater flow from lift stations in Photos 1 and 4.



Photo 8

View of lift station which conveys permeate from WWTP effluent to the Chesapeake Bay (CB). Note that there is not continuous flow to the CB from this lift station.



Photo 9

Additional view of in ground tank and lift station from Photos 7 and 8 and their proximity in location.

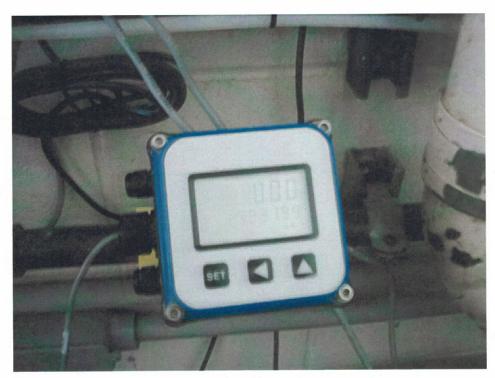


Photo 10

Effluent meter exiting UV treatment. Reading read 0.00 at time of inspection.



View of bar screen at WWTP.

Additional view of bar screen at WWTP.



Photo 13

View of EQ tank. Site representatives stated that the EQ tank pumps between high and low flow limits which were unknown at the time of the inspection.



Photo 14
View of vibratory separator.



Photo 15

View of first anoxic tank which receives flow from the EQ basin. Site representatives stated that mixing occurs in this tank.



Photo 16
Additional view of anoxic tank from Photo 15.

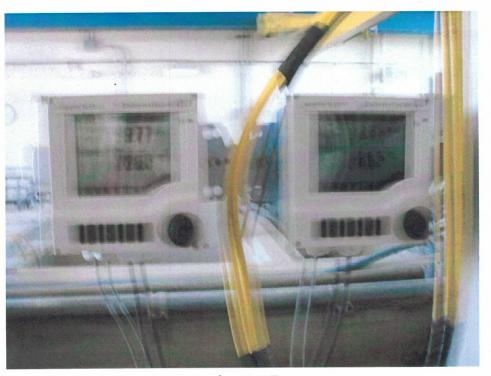


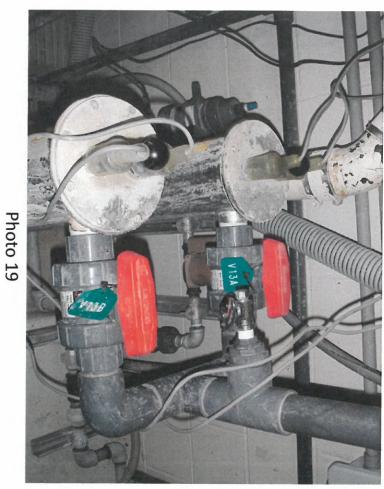
Photo 17

View pH probe meter and DO probe meter. Note site representatives stated the pH probe was located at the EQ tank and the DO probe was located in the first aeration tank.



Photo 18

View of pH (9.77) and DO (3.61 mg/l) readings from Photo 17.



Fecal and grab sample location.

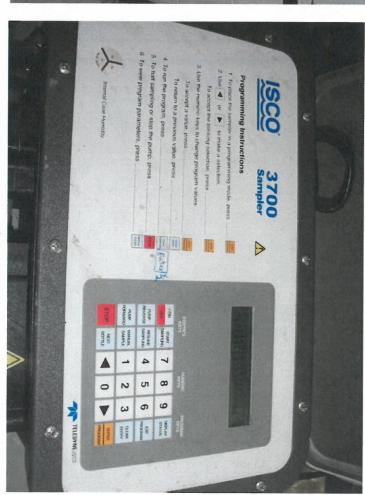


Photo 20

View of ISCO composite sampler.

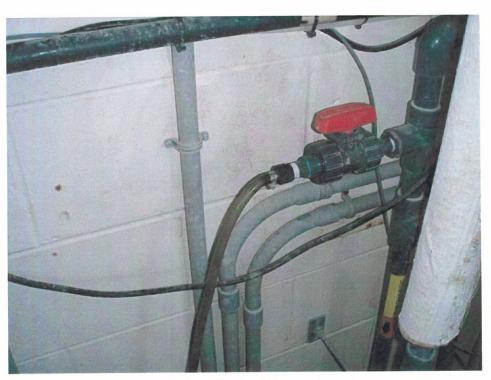


Photo 21 Location of effluent from composite sampler.



Photo 22

View of DO meter reader at first anoxic tank. Reading was requested of site representatives at time of the inspection.



Photo 23

View of first aeration tank which receives flow from first anoxic tank.



Photo 24

View of location of Micro C addition into aeration tank. Site representatives stated that the rate of Micro C addition was 7 minutes on and 23 minutes off at 70 speed/80 stroke.

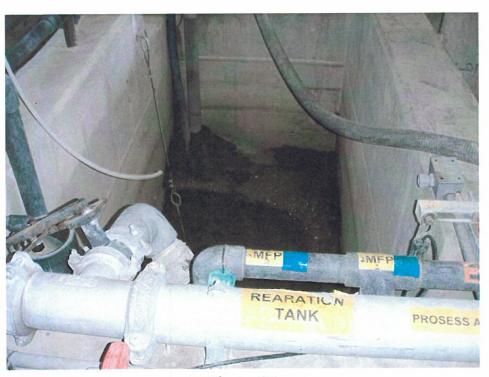


Photo 25
View of reaeration tank.



Photo 26

View of secondary anoxic tank which conveys flow to reaeration tank in Photo 25.

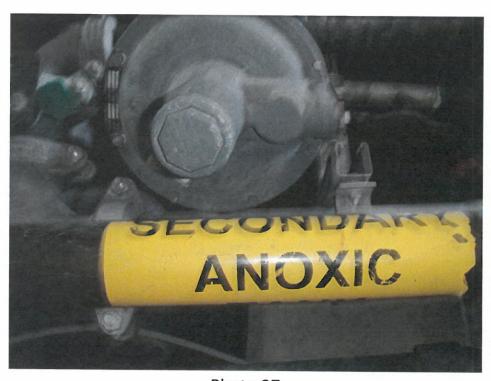


Photo 27 View of secondary anoxic tank.



Photo 28

Close up view of wastewater flowing from secondary Anoxic tank to reaeration tank. Wastewater appeared to have heavy solids present.



Photo 29 Additional view of Photo 28.



Photo 30

View of membrane filters. Site representatives stated that the membrane filters clog every 2-3 weeks.